PHARYNGEAL SPLIT IN SYRIAC

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ABSTRACT

The fact that Modern Chaldean is related to Classical Syriac is a chance to examine the changes that have occurred in the pharyngeals in the process of change. The analysis shows that they do not behave as a class; rather, the voiceless [H] changes to velar [xy], while the voiced [9] changes to a laryngeal stop [?]. The changes that occur in all the positions of the triliteral roots are not dependent on vocalic, but on root consonantal contexts.

Linguists assume that living languages change with time, and that daughter language inherits a portion of the lexicon from the mother language. Changes will be uneven; some will be more marked in certain areas of the lexicon than in others, and that changes will be systematic in going from the old to the new phonological system. The fact that Chaldean is related to classical Syriac is an opportunity to examine some of the phonological changes that have taken place in the process of going from one to the other. This paper will concentrate on the changes in the two pharyngeals [H,9].

The term "classical Syriac" refers to the language that has been in use since the third century A.D. Syriac is related to ancient Aramaic and is considered a later form of it. Syriac is still in use today in liturgical functions in many Christian communities of the Middle East. Chaldean refers to a modern dialect of Syriac that is currently spoken in parts of Iraq. Sara (1974).

The procedure followed in the study was to take the dictionary of Jacob Manna (1975) as the source of lexical items. All the lexical items that contained pharyngeals in this lexicon were isolated, then a list was drawn up of all the lexemes that have come into Chaldean, and that share the same semantic references with Syriac. A transcription was made of both lists. The transcription of Syriac depends primarily on the orthography given in the lexicon, while that for Chaldean is based on native speaker pronunciation. The study concentrated mainly on the triliteral roots in both languages, and only marginally includes their derivational or non-triliteral forms.

THE PHARYNGEAL [H]

[H] is a voiceless pharyngeal fricative. It occurs in initial, medial and final positions in words,i.e. as first, second and third radical, and in clusters. Since one is aware of the differences in the pharyngeal occurrences in both languages, the point of interest is: Where does Chaldean differ from Syriac in the shared lexical items, and are the differences haphazard or rule governed? The proper method is to isolate all the contexts in which pharyngeals occur in the shared items of the two languages, and to determine whether the changes that occur are contextually determined or not. A look at a list of shared items where [H] occurs initially in words is given below in parallel columns. The two columns highlight the differences between the two languages:

SYRIAC	CHALDEAN	
[Hpr]	[xpr]	'dig`
[Hwr]	[xwr]	'white`
[HwH]	[xwx]	'peach`
[H y]	[x y]	'life`
[Hyt]	[xyt]	'sew`
[Hyp]	[xyp]	'bathe`
[Hyr]	[xyr]	'look`
[Hyl]	[xyl]	'power`
[Hmr]	[xmr]	'ass`
[Hmm]	[xmm]	'hot`
[Hmt]	[xmt]	'anger`
[Hmŝ]	[xmŝ]	'five`
[Hmr]	[xmr]	'bead`
[Hmr]	[xmr]	'yeast`
[Hms]	[xms]	'ferment`
[Hm9]	[xm?]	'leaven`
[H t]	[x t]	'sister`
[Htn]	[xtn]	'groom`
[Htm]	[xtm]	'conclude`
[Htr]	[xtr]	'strike`
[Htp]	[xtf]	'snatch`
[Hty]	[xty]	'sin`
[Hd]	[xd]	'one`
[Hdt]	[xt]	'new`
[Hdr]	[xdr]	'turn`
[Hdy]	[xdy]	'rejoice`
[Hsr]	[xsr]	'lose`
[Hs]	[xs.]	'lettuce`
[Hsl]	[xsl]	'wean`
[Hsd]	[xsd]	'harvest`
[Hsy]	[xsy]	'spay`
[Hl]	[xl]	'vinegar`
[Hlp]	[xlp]	'exchange`
[Hlm]	[xlm]	'thick`
[Hlm]	[xlm]	'dream`
[Hly]	[xly]	'sweet`
[Hlt]	[xlt]	'mix`
[HrHr]	[xrxr]	'snore`
[Hrp]	[xrp]	'sharp`
[Hry]	[xry]	'defecate`
[Hrb]	[xrw]	'spoil`
[Hrz]	[xrz]	'string`
[Hŝl]	[xŝl]	'strike`
[Hŝk]	[xŝk]	'darken`
[HŝH]	[xŝx]	'suitable`
[Hŝb]	[xŝw]	'think`
[HH]	[xx]	'plum`
**********	**********	
[Hbb]	[Hbb]	'love`
[Hnq]	[Hnq]	'choke`
[Hnn]	[Hnn]	'kind`
[Hnp]	[Hnp]	'pagan`
[Hzq]	[Hzq]	'tighten`
[Hzm]	[Hzm]	'tie`
[Hzrn]	[Hzrn]	'june`
[Hkm]	[Hkm]	'govern`
[Hql]	[Hql]	'field`
[Hqq]	[Hqq]	'true`
[Hŝŝ]	[Hŝŝ]	`passion`

In the items listed above, and separated by *** one notices that [H] changes to [x] in some contexts but not in others. Listing the contexts gives an interesting pattern of change and stability in initial position:

[H] = [H]	[H] > [x]
[-b]	[-p]
[-n]	[-m]
[-z]	[-s,ŝ,t,d,t,s,l,r]
[-k,q]	[-w,y]

The above pattern of occurrence is consistent. Only exception to the above distributional occurrences of [H] in Chaldean was noticed. i.e: [Hrŝ] 'magic`.

The occurrences of [H] in medial position fare in a similar manner. The following list of shared lexical items illustrates this point:

[lHm]	[lxm]	'bread`
[tHm]	[txm]	'boundry`
[nHt]	[nxt]	'descend`
[ŝHn]	[ŝxn]	'warm`
[tHn]	[txn]	'grind`
[?Hn]	[?xn]	'brother`
[lHd]	[lxd]	'alone`
[ŝHt]	[ŝxt]	'dirt`
[kHl]	[kxl]	'mascara`
[ŝHlp]	[ŝxlp]	'change`
[rHŝ]	[rxŝ]	'walk`
[gHk]	[kxk]	'laugh`
[mlHb]	[mlxw]	'pitch fork`
[sHy]	[sxy]	'swim`
**********		
[rHq]	[rHq]	'far`
[tHl]	[tHl]	'spleen`

Though the items in the above list are less numerous than the ones where [H] occurs initially, they are, nontheless, informative on the relevance of the environments in which [H] is retained in the Chaldean lexemes. One notices that the number of environments in which the original [H] is retained has shrunk and, the [-n,-k] environements are no longer effective in retaining the [H].

[H] = [H]	[H] > [x]
[-b]	[-p]
[-z]	[-m,n]
[-q]	[-s,ŝ,t,d,s,l,r]
	[-k]
	[-w,y]

It appears then that there is a gradation in the strength of the environments, i.e: the initial position in the root is the strongest and gives the maximum number of contexts in which [H] is retained, while the other environments will lose some of their conditioning power.

If the tendency to reduce the potency of the environment in retaining the Syriac [H] as we move towards the final radical of the word is valid, then there should be no restriction on the change of all the final [H]s to [x]s. Since by definition only the root consonantal patterns are operative in the change, there are no other root consonants occuring after the final radical. The following representative list of lexical items with the final [H] illustrates the change:

[?H]	[?xn]	'brother`
[pH]	[fx]	'trap`
[npH]	[npx]	'blow`
[rtH]	[rtx]	'boil`
[ptH]	[ptx]	'open`
[p̲sH]	[p̲sx]	'happy`
[s̲tH]	[s̲tx]	'spread`
[tl̲H]	[tl̲x]	'demolish`
[ŝlH]	[ŝlx]	'take-off`
[plH]	[plx]	'work`
[mlH]	[mlx]	'salt`
[ryH]	[ryx]	'smell`
[s̲rH]	[s̲rx]	'shout`
[b̲rH]	[b̲rx]	'lamb`
[?rH]	[?rx]	'road`
[mŝH]	[mŝx]	'smear`
[pŝH]	[pŝx]	'warp`
[lkH]	[lkx]	'lick`
[pqH]	[pqx]	'blossom`
[mwH]	[mwx]	'brain`
[ŝmH]	[ŝmx]	'trampled`
[nnH]	[nnx]	'mint`
[pwH]	[pwx]	'wind`
[t̲lwH]	[t̲lwx]	'pea`
[pyH]	[pyx]	'cool`
[nyH]	[nyx]	'rest`
[myH]	[myx]	'smell`
**********		
[gnH]	[gnH]	'blasphemy`
[s̲lh]	[s̲lH]	'apostle`
[mŝH]	[mŝH]	'messiah`
[zyH]	[zyH]	'psalmody`
[mdnH]	[mdnH]	'East`
[mdbH]	[mdbH]	'altar`

The above list of items indicates that there is no segmental that restricts the change of Syriac [H] to Chaldean [x] in final position. The items below ***** retain the final [H], but they are all liturgical terms that have been kept in their original place for special purposes.

From the above study one can see the tendency of syriac [H] to change to [x] in Chaldean. There are some environments in which it is kept. These environments are more operative when [H] is the first radical of the stem than when it is medial. In the final position there are no phonological restrictions but special uses of certain words have kept the original word in tact.

THE PHARYNGEAL [9]

[9] is a voiced pharyngeal fricative. The voiceless pharyngeal fricative [H] changed to another fricative, i.e: [x]. They differ only in their points of articulation. [H] changes from the pharyngeal to the velar [x] articulation. The articulation of [9], however, does not change its point of articulation to a corresponding velar fricative, but moves in a different direction. It changes more than one feature of its articulation as the following sets of data indicate.

[9] in initial position,i.e. as the first radical:

[9pr]	[?pr]	'dust, dirt`
[9p̲s]	[?p̲s]	'gall nut`
[9b̲b]	[?b̲b]	'lap`
[9bd]	[?wd]	'do,make`
[9m]	[?m]	'with`
[9mq]	[?mq]	'depth`
[9nz]	[?zz]	'goat`
[9nb]	[?nw]	'grape`
[9zqt]	[?sqt]	'finger ring`
[9zl]	[?zl]	'weave`
[9sr]	[?sr]	'ten`
[9s̲r]	[9s̲r]	'squeeze`
[9s̲y]	[9s̲y]	'rebel,mutiny`
[9d]	[?d]	'feast`
[9t̲m]	[?t̲m]	'thigh`
[9rbl]	[?rbl]	'sieve`
[9rq]	[?rq]	'run`
[9qrb]	[?qrw]	'scorpion`
[9qbr]	[?qbr]	'mouse`
[9qt]	[?qt]	'narrow,tight`
**********		
[9wl]	[9wl]	'moral evil`
[9md]	[9md]	'baptize`
[91m]	[91m]	'world`

The above list indicates that the Syriac [9] changes consistently into a glottal stop [?] in the corresponding Chaldean items in initial position. The list of exceptions in which [9] occurs initially is very limited and the items tend to be associated with matters liturgical, e.g. items below the *** in the above list.

[9] in medial position, i.e. as the second radical.

[t̲9n]	[t?n]	'to carry`
[t̲9m]	[t̲m?]	'taste`
[b̲9t]	[b̲?t]	'egg`
[ŝ9t]	[ŝ?t]	'yellow`
[l9s]	[l?s]	'chew`
[t9l]	[t?l]	'fox`
[ŝ9l]	[ŝ?l]	'cough`
[r9l]	[r?l]	'shiver`
[z9r]	[z?r]	'small`
[q9r]	[q?r]	'unlodge`
[s9r]	[s?r]	'sexton`
[d9k]	[d?k]	'knead`
[d9k]	[d?x]	'extinguish`
[b9y]	[b?y]	'wish,want`
[r9y]	[r?y]	'graze`
**********		
[ŝ9nn]	[ŝ9nn]	'hossana`
[z9prn]	[z9prn]	'saffron`

[9] in mid position in Syriac changes to a glottal stop in the corresponding Chaldean items. The few exceptions fit into the liturgical context or are abvious borrowings.

[9] in final position i.e. as the last radical.

[dm9]	[dm?]	'tear`
[nb9]	[nb?]	'spring`
[ŝb9]	[sw?]	'satisfy`
[ŝm9]	[ŝm?]	'hear`
[zd9]	[zd?]	'fear`
[?d9]	[?d?]	'know`
[qt̲9]	[qt̲?]	'sever`
[ŝl9]	[ŝl?]	'uproot`
[bl9]	[bl?]	'swallow`
[qr9]	[qr?]	'squash`
[mr9]	[mr?]	'pain`
[zr9]	[zr?]	'plant`
[dr9]	[dr?]	'arm`
[ŝy9]	[ŝy?]	'paint,smear`
[my9]	[my?]	'melt`
[tŝ9]	[tŝ?]	'nine`
[rq9]	[rq?]	'patch`
[?ŝ9]	[?ŝ]	'jesus`
**********		
[?ŝ9]	[?ŝ9]	'Jesus`
[rŝ9]	[rŝ9]	'blasphemy`

In the above list of items, the finally occuring [9] in Syriac almost invariably changes to a glottal stop in Chaldean. The rare forms in which [9] is retained are liturgically oriented lexemes that have been kept in their original forms, and are used in these restricted contexts.

The tendency of the two pharyngeals to change over time is evident from the above data. What is of interest is that their change is not parallel. They do not change to their corresponding fricatives in another class. Rather each changes into a separate segment, in a separate subclass of sounds. If there are contexts that have retained some of the Syriac [H] in certain positions,e.g. as the first or second radicals of the roots, none seem to be evident in the case of the pharyngeal [9], as far as the assembled data indicate. The change in [9] has been more radical than the change in [H].

This paper has concentrated on the consonantal environment of the pharyngeals as a basis for their retention or deletion. The question arises as to whether the vowels are operative in this process of change? From the data studied so far, there is no evidence that the vowels have been a factor of change in these cases. The changes are maintained in the derived forms irrespective of affixation or vowel variations in the derived forms of the same root. e.g.

[Hsr]	[xsr]	'lose'
[xasrin]		'I lose`
[xaaas̲ir]		'He loses'`
[xs̲irri]		'I lost`
[maxsoor̲i]		'make lose`
[9rq]	[?rq]	'run`
[?arq̲in]		'I run`
[?aar̲iq̲]		'He runs`
[?r̲iq̲li]		'I ran`
[ma?rooq̲i]		'make run`

The above sketch of the pharyngeal occurrences in Syriac and Chaldean shows the tendecy of these sounds to change to other sounds. The conclusions is that this class of sounds does not change to the corresponding sounds of another class, but the class members change into sounds of different classes.

The break down on the number of items that were borrowed from Syriac into Chaldean is shown below.

HCC	79/230	34%	9CC	30/155	19%
CHC	19/117	16%	C9C	21/115	18%
CCH	30/114	26%	CC9	20/103	19%

This indicates that the number of lexical items inherited from Syriac into Chaldean is roughly speaking about 22% of the items that contain one of the pharyngeals.

SOURCES

Jacob Manna. 1900/1975. CHALDEAN-ARABIC DICTIONARY. reprinted with a new appendix by Raphael J. Bidawid. (Beirut: Babel Center Publications) pp. 28 & 986.

Solomon I. Sara. 1974. A DESCRIPTION OF MODERN CHALDEAN. (The Hague: Mouton Publishers).

[Legend: H= , 9= , ŝ= , s̲= , t̲=]